Original Classifications	Combined Classifications
4 205/731	9 204/196.23
3 204/196.11	8 204/196.16
2 29/455.1	8 205/733
2 204/196.02	8 392/457
2 204/196.05	7 204/196.15
2 204/196.15	7 205/731
2 204/196.16	6 204/196.18
2 204/196.33	6 204/196.19
2 204/196.34	6 204/280
2 205/733	5 205/732
2 205/740	5 205/740
2 439/42	4 122/13.01
	4 204/196.11
Cross-Reference Classifications	4 204/196.24
8 204/196.23	3 29/458
8 392/457	3 204/196.02
6 204/196.16	3 204/196.1
6 205/733	3 204/196.17
5 204/196.15	3 204/196.25
5 204/196.18	3 204/196.33
5 204/196.19	3 204/196.37
5 204/280	3 204/196.38
5 205/732	3 204/290.12
4 122/13.01	3 204/290.14
4 204/196.24	3 205/730
3 204/196.25	3 205/735
3 204/196.37	2 29/455.1
3 204/196.38	2 29/469
3 204/290.12	2 122/19.2
3 204/290.14	2 126/361.1
3 205/730	2 138/DIG 6
3 205/731	2 204/196.05
3 205/735	2 204/196.07
3 205/740	2 204/196.21
2 29/458	2 204/196.26
2 29/469	2 204/196.3
2 126/361.1	2 204/196.31
2 138/DIG 6	2 204/196.34

2 204/288.1

2 204/196.1

Cross-Reference Classifications

- 2 204/196.17
- 2 204/196.21
- 2 204/196.26
- 2 204/196.3
- 2 204/196.31
- 2 204/288.1
- 2 204/292
- 2 204/293
- 2 205/734
- 2 228/184

Combined Classifications

- 2 204/292
- 2 204/293
- 2 205/734
- 2 228/184
- 2 439/42

9	Class 204 204/193	(1 OR, 8 XR) : CHEMISTRY: ELECTRICAL AND WAVE ENERGY APPARATUS .Electrolytic 1Object protectionInternal battery 3Anode contains aluminum
8	Class 204: 204/193	Internal battery 5With fluid inlet or outlet means used or protected
8	Class 205: 205/687 205/704 205/724 205/730 205/731	(2 OR, 6 XR) ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION) .Metal or metal alloy Object protection Internal battery action (e.g., using sacrificial anode, etc.) Ferrous metal Using anode containing magnesium
8 3	Class 392: 392/441	(0 OR, 8 XR) ELECTRIC RESISTANCE HEATING DEVICES .Tank or container type liquid heaterLine connected tankWith immersion heating elementWith protecting means against galvanic corrosion
7 2		Internal battery
7 2		(4 OR, 3 XR) ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION) .Metal or metal alloy Object protection Internal battery action (e.g., using sacrificial anode, etc.) Ferrous metal

6	204/196.18 (1 OR Class 204: CHEI 204/193 APPA 204/194 .Electr 204/196.01 204/196.1 204/196.17 204/196.18	MISTRY: ELECTRICAL AND WAVE ENERGY RATUS rolyticObject protectionInternal batteryRigid anode with rigid support
6	204/196.19 (1 OR Class 204: CHEN 204/193 APPA 204/194 .Electr 204/196.01 204/196.1 204/196.17 204/196.18 204/196.19	MISTRY: ELECTRICAL AND WAVE ENERGY RATUS rolyticObject protectionInternal batteryRigid anode with rigid support
6	204/280 (1 OR, Class 204: CHEN 204/193 APPA 204/194 .Electr 204/279Elem 204/280Elec	MISTRY: ELECTRICAL AND WAVE ENERGY RATUS rolytic ents
5	205/687 ELECT COMP 205/704 .Metal 205/724Objec 205/730Inter 205/731Ferr	TROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF ARING THE COMPOSITIONS FROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE OSITION) or metal alloy ext protection nal battery action (e.g., using sacrificial anode, etc.)
5	205/687 ELECT COMP 205/704 .Metal 205/724Object	3 XR) TROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF ARING THE COMPOSITIONS FROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE OSITION) or metal alloy et protection el (e.g., ship hull, steam boiler, etc.)
4	122/13.01 (0 OR, Class 122: LIQUI 122/13.01	4 XR) ID HEATERS AND VAPORIZERS STAND BOILER (E.G., WATER HEATER, ETC.)

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4 204/196.11 (3 OR, 1 XR)
    Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
    204/193
            APPARATUS
    204/194 .Electrolytic
    204/196.01
                     .. Object protection
    204/196.1
                     ...Internal battery
    204/196.11
                     ....Resistor or impedance in series between anode and object
4 204/196.24 (0 OR, 4 XR)
    Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
             APPARATUS
    204/193
    204/194
              .Electrolytic
    204/196.01
                     .. Object protection
                     ...Internal battery
    204/196.1
                     ....Anode contains aluminum
    204/196.23
                     ....And magnesium
    204/196.24
3 29/458
            (1 OR, 2 XR)
    Class 029: METAL WORKING
    29/592
              METHOD OF MECHANICAL MANUFACTURE
    29/428
              .Assembling or joining
    29/458
              .. With coating before or during assembling
3 204/196.02 (2 OR, 1 XR)
    Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
             APPARATUS
    204/193
    204/194
              .Electrolytic
    204/196.01
                     .. Object protection
                     ...With control means responsive to sensed condition
    204/196.02
3 204/196.1
             (1 OR, 2 XR)
    Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
             APPARATUS
    204/193
    204/194
              .Electrolytic
    204/196.01
                     .. Object protection
    204/196.1
                     ...Internal battery
3 204/196.17 (1 OR, 2 XR)
    Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
    204/193
             APPARATUS
    204/194
             .Electrolytic
                    .. Object protection
    204/196.01
                     ...Internal battery
    204/196.1
                    ....Rigid anode with rigid support
    204/196.17
3 204/196.25 (0 OR, 3 XR)
    Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY
             APPARATUS
    204/193
    204/194
             Electrolytic
    204/196.01
                    .. Object protection
                    ...Internal battery
    204/196.1
    204/196.23
                    ....Anode contains aluminum
    204/196.25
                    .....And zinc
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Class 204 204/193	- 1
Class 204 204/193	
Class 204 204/193	
Class 204 204/193 204/194 204/279	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Class 204 204/193 204/194 204/279	\cdot , \cdot , \cdot
3 205/730 Class 205 205/687 205/704 205/724 205/730	(0 OR, 3 XR) : ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION) .Metal or metal alloy Object protection Internal battery action (e.g., using sacrificial anode, etc.)

3 205/735 (0 OR, 3 XR) Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS 205/687 ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE COMPOSITION) 205/704 .Metal or metal alloy 205/724 .. Object protection ...Ferrous metal 205/735 (2 OR, 0 XR) 2 29/455.1 Class 029: METAL WORKING 29/592 METHOD OF MECHANICAL MANUFACTURE 29/428 .Assembling or joining 29/455.1 .. Spaced wall tube or receptacle 2 29/469 (0 OR, 2 XR) Class 029: METAL WORKING 29/592 METHOD OF MECHANICAL MANUFACTURE 29/428 .Assembling or joining 29/469 .. Assembling a subassembly, then assembling with a second subassembly 2 122/19.2 (1 OR, 1 XR) Class 122: LIQUID HEATERS AND VAPORIZERS 122/13.01 STAND BOILER (E.G., WATER HEATER, ETC.) .And casing feature for stand boiler or external water tank therefor 122/19.2 2 126/361.1 (0 OR, 2 XR)Class 126: STOVES AND FURNACES 126/383.1 ...Collecting, directing, or shielding feature for overflow or spatter of the liquid 126/361.1 .Boiler receiving hot liquid or steam from stove or furnace (e.g., kitchen boiler, range boiler, etc.) 2 138/DIG 6 (0 OR, 2 XR) Class 138: PIPES AND TUBULAR CONDUITS 138/DIG 6 Corrosion 2 204/196.05 (2 OR, 0 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY 204/193 **APPARATUS** .Electrolytic 204/194 204/196.01 .. Object protection ...With programmed, cyclic, or time responsive control means 204/196.05 2 204/196.07 (1 OR, 1 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY **APPARATUS** 204/193 204/194 .Electrolytic .. Object protection 204/196.01 204/196.06 ...With measuring, testing, or sensing meansInternal battery 204/196.07

2 204/196.21 (0 OR, 2 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY 204/193 APPARATUS 204/194 .Electrolytic 204/196.01 .. Object protection ...Internal battery 204/196.1Earth grounded object or protection means 204/196.21 2 204/196.26 (0 OR, 2 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY 204/193 APPARATUS 204/194 .Electrolytic .. Object protection 204/196.01 204/196.26 ...Resistor or impedance in series between power supply and object 2 204/196.3 (0 OR, 2 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY **204/193 APPARATUS** 204/194 .Electrolytic 204/196.01 .. Object protection 204/196.3 ...Rigid anode with rigid support 2 204/196.31 (0 OR, 2 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY 204/193 APPARATUS 204/194 .Electrolytic 204/196.01 .. Object protection ...Rigid anode with rigid support 204/196.3Threaded coupling for rigid anode or rigid support 204/196.31 2 204/196.34 (2 OR, 0 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY 204/193 APPARATUS 204/194 .Electrolytic .. Object protection 204/196.01 ...Flexible cable, chain, or wire anode or support 204/196.33 204/196.34Plural anode sections on single cable, chain, or wire 2 204/288.1 (0 OR, 2 XR)Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY 204/193 APPARATUS 204/194 .Electrolytic .. Elements 204/279 204/280 ... ElectrodesWith electrode supporting means 204/286.1 204/288.1And dielectric gasket or spacer

2 204/292 (0 OR, 2 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY 204/193 **APPARATUS** 204/194 .Electrolytic 204/279 .. Elements ...Electrodes 204/280Composition 204/291Metallic 204/292 2 204/293 (0 OR, 2 XR) Class 204: CHEMISTRY: ELECTRICAL AND WAVE ENERGY 204/193 **APPARATUS** .Electrolytic 204/194 ..Elements 204/279 204/280 ...Electrodes 204/291CompositionMetallic 204/292 204/293Alloys (0 OR, 2 XR) 2 205/734 Class 205: ELECTROLYSIS: PROCESSES, COMPOSITIONS USED THEREIN, AND METHODS OF PREPARING THE COMPOSITIONS ELECTROLYTIC MATERIAL TREATMENT (PRODUCT, PROCESS, AND ELECTROLYTE 205/687 COMPOSITION) 205/704 .Metal or metal alloy .. Object protection 205/724 205/734 ...Metal imbedded in asphalt, concrete, stone, or masonry, (e.g., reinforced concrete, etc.) 2 228/184 (0 OR, 2 XR) Class 228: METAL FUSION BONDING 228/101 **PROCESS** .Plural joints 228/178 ..Of mechanical article 228/182 ...Pressure vessels, tanks, and container-type structures 228/184 2 439/42 (2 OR, 0 XR) Class 439: ELECTRICAL CONNECTORS WITH VACUUM APPLYING MEANS, E.G., SUCTION CUP 439/41 439/42 .To urge mating connectors or contacts together

List of Patents Returned in Closeness Factor Order from a PLUS Search of 09/816,148 on May 06, 2002

6,331,242 85 4,848,616 66 5,176,807 81 4,087,742 65 4,786,383 81 4,051,007 65 6,224,743 81 4,457,821 64 5,505,826 80 4,255,647 64 5,728,275 78 4,437,957 64 5,853,553 78 4,936,969 64 5,855,747 78 4,038,168 64 5,547,311 75 4,511,444 64 5,305,631 75 4,623,435 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 4,879,801 63 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102	Patent No.	<u>Closeness</u> <u>Factor</u>	Patent No.	Closeness Factor
4,786,383 81 4,051,007 65 6,224,743 81 4,457,821 64 5,505,826 80 4,255,647 64 5,728,275 78 4,437,957 64 5,853,553 78 4,936,969 64 5,855,747 78 4,038,168 64 5,547,311 75 4,511,444 64 5,305,631 75 4,623,435 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	6,331,242	85	4,848,616	66
6,224,743 81 4,457,821 64 5,505,826 80 4,255,647 64 5,728,275 78 4,437,957 64 5,853,553 78 4,936,969 64 5,855,747 78 4,038,168 64 5,547,311 75 4,511,444 64 5,305,631 75 4,623,435 64 5,339,911 75 5,649,591 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,176,807	81	4,087,742	65
5,505,826 80 4,255,647 64 5,728,275 78 4,437,957 64 5,853,553 78 4,936,969 64 5,855,747 78 4,038,168 64 5,547,311 75 4,511,444 64 5,305,631 75 4,623,435 64 5,339,911 75 5,649,591 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	4,786,383	81	4,051,007	65
5,728,275 78 4,437,957 64 5,853,553 78 4,936,969 64 5,855,747 78 4,038,168 64 5,547,311 75 4,511,444 64 5,305,631 75 4,623,435 64 5,339,911 75 5,649,591 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	6,224,743	81	4,457,821	64
5,853,553 78 4,936,969 64 5,855,747 78 4,038,168 64 5,547,311 75 4,511,444 64 5,305,631 75 4,623,435 64 5,339,911 75 5,649,591 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,505,826	80	4,255,647	64
5,855,747 78 4,038,168 64 5,547,311 75 4,511,444 64 5,305,631 75 4,623,435 64 5,339,911 75 5,649,591 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 4,171,254 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,728,275	78	4,437,957	64
5,547,311 75 4,511,444 64 5,305,631 75 4,623,435 64 5,339,911 75 5,649,591 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 4,879,801 63 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,853,553	78	4,936,969	64
5,305,631 75 4,623,435 64 5,339,911 75 5,649,591 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,855,747	78	4,038,168	64
5,339,911 75 5,649,591 64 5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,547,311	75	4,511,444	64
5,910,236 75 4,306,189 63 4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,305,631	75	4,623,435	64
4,855,029 72 4,773,977 63 4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,339,911	75	5,649,591	64
4,407,711 70 4,783,896 63 4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,910,236	75	4,306,189	63
4,434,039 70 4,838,208 63 5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	4,855,029	72	4,773,977	63
5,344,781 68 4,879,801 63 6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	4,407,711	70	4,783,896	63
6,213,784 68 3,864,234 61 4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	4,434,039	70	4,838,208	63
4,035,903 68 4,171,254 61 4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	5,344,781	68	4,879,801	63
4,267,029 68 4,397,726 61 4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	6,213,784	68	3,864,234	61
4,251,343 67 4,778,949 61 5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	4,035,903	68	4,171,254	61
5,324,397 67 6,206,742 61 3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	4,267,029	68	4,397,726	61
3,855,102 67 3,907,658 61 5,256,267 66 4,972,066 60	4,251,343	67	4,778,949	61
5,256,267 66 4,972,066 60	5,324,397	67	6,206,742	61
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3,855,102	67	3,907,658	61
5,334,299 66 4,975,560 60	5,256,267	66	4,972,066	60
	5,334,299	66	4,975,560	60